

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
16 June 2005 (16.06.2005)

PCT

(10) International Publication Number
WO 2005/055617 A1

(51) International Patent Classification⁷: **H04N 13/00**

Intellectual Property, & Standards, Cross Oak Lane,
Redhill Surrey RH1 5HA (GB).

(21) International Application Number:
PCT/IB2004/052643

(74) Agents: **WHITE, Andrew, G.** et al.; c/o Philips Intellectual
Property, & Standards, Cross Oak Lane, Redhill Surrey
RH1 5HA (GB).

(22) International Filing Date: 2 December 2004 (02.12.2004)

(25) Filing Language: English

(81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(26) Publication Language: English

(30) Priority Data:
0328005.4 3 December 2003 (03.12.2003) GB

(71) Applicant (*for all designated States except US*): **KONIN-
KLJKE PHILIPS ELECTRONICS N.V.** [NL/NL];
Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

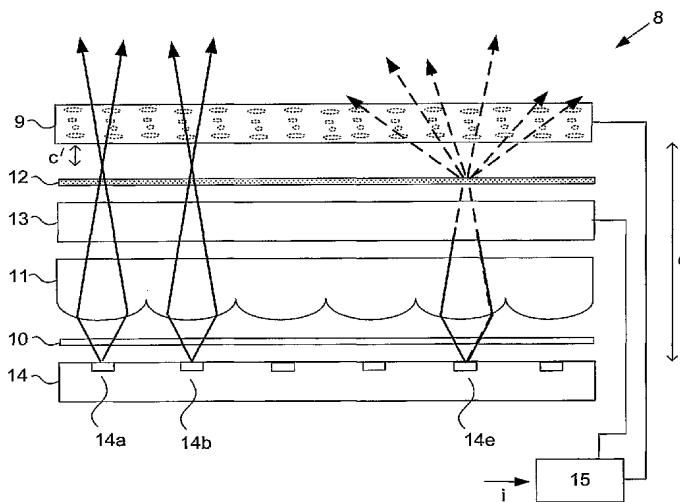
(84) Designated States (*unless otherwise indicated, for every
kind of regional protection available*): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **IJZERMAN,
Willem, L.** [NL/NL]; c/o Philips Intellectual Property,
& Standards, Cross Oak Lane, Redhill Surrey RH1 5HA
(GB). **CORNELISSEN, Hugo, J.** [NL/NL]; c/o Philips

[Continued on next page]

(54) Title: 2D/3D IMAGE DISPLAY



(57) Abstract: A display (8) comprises a display panel (9), a polariser (10), a polarisation rotator (13), and a scatterer (12) arranged to scatter light having a first polarisation as compared with light having a second polarisation. The display (8) can be switched between 2D and 3D modes by operating the polarisation rotator (13) accordingly. In 3D mode, the polarisation rotator (13) transmits light with relatively little or no change to its polarisation. Light transmitted by the scatterer (12) is then used to present a three-dimensional image (50). In 2D mode, the polarisation rotator (13) alters the polarisation of the light and light that is scattered by the scatterer (12) is used to present a two-dimensional image (51). The polarisation rotator (13) maybe arranged so that light incident on a first area thereof undergoes a different change in polarisation to light incident on a second area, in order to allow simultaneous presentation of 2D and 3D images (51, 50).

WO 2005/055617 A1



SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA,*

SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

Published:

- *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.